

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1, 6, 8-9 and 11-14 are pending.

Remarks Regarding Amendments

To expedite prosecution and/or to reduce issues on Appeal, Applicants have incorporated the limitations of claims 3-5 into claim 1. The amendment to claim 1 is supported by claim 1 and now canceled claims 3-5. No new matter is added and entry of the amendment is requested.

Remarks Regarding Interview

Applicants thank the Examiner for the courtesy of an interview on September 22, 2009. Applicants' notes of the substance of the interview is listed below:

In the interview, the allowability of the claims were discussed. Furthermore, the amendment to claim 1 to incorporate the recitations of claims 3-5 was discussed. The Examiner indicated that such an amendment would make claim 1 more allowable although a new search may be needed.

Applicants also note that we have amended the claims exactly as discussed in the interview in the current Amendment.

Remarks Regarding Section 102

Claims 1 stand rejected under 35 U.S.C. § 102 as allegedly anticipated by Inui (U.S. Patent no. 5,889,095). Applicants traverse.

A claim is anticipated only if each and every limitation as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is claimed. See *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants' claimed invention, as recited in claim 1, is directed to a radiation-curable resin comprising a compound of formula (1). In contrast, Inui is completely silent with respect to "a radiation curable resin". Inui is directed to a stabilizer for

organic materials such as thermoplastic resin, thermosetting resin, natural or synthetic rubber, mineral oil, lubricating oil, adhesive or paint. See, Inui, column 1. Inui attempts to stabilize there material "to develop the phosphorous compound which hardly cause the hydrolysis and the stabilizing effect to heat and oxidation deterioration. Significantly, providing beneficial effects for radiation curable resins is not one of the goals of Inui.

Furthermore, Applicants have added the limitations of claims 3-5 into amended claim 1 which further recite concentrations of urethane (meth)acrylate and reactive diluents that are not specified in Inui.

Since each and every limitation of amended claim 1 is not disclosed in Inui, there can be no anticipation and the withdrawal of this rejection is requested.

Remarks Regarding Section 103

Claims 3-6, 8, 9, 11 and 12 stand rejected under 35 U.S.C. § 103 as allegedly obvious in view of a combination of Shustack (U.S. Patent No. 5,146,531) and Inui (U.S. Patent 5,889,095). Applicants traverse.

A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. *In re Kahn*, 78 USPQ2d 1329, 1334 (Fed. Cir. 2006) citing *Graham v. John Deere*, 148 USPQ 459 (1966). The *Graham* analysis needs to be made explicitly. *KSR v. Teleflex*, 82 USPQ2d 1385, 1396 (2007). It requires findings of fact and a rational basis for combining the prior art disclosures to produce the claimed invention. See *id.* ("Often, it will be necessary for a court to look to interrelated teachings of multiple patents . . . and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue"). The use of hindsight reasoning is impermissible. See *id.* at 1397 ("A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning"). Thus, a *prima facie* case of obviousness requires "some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct." *Kahn* at 1335; see *KSR* at 1396.

First, Applicants note that claims 6, 8, 9, 11 and 12 each depend on claim 1. Claim 1 is not anticipated by Inui as discussed above. Further, claim 1 has not been rejected as obvious in view of Shustack and Inui. Since claims 6, 8, 9, 11 and 12 depend on claim 1 and incorporate all of the recitations of claim 1, claims 6, 8, 9, 11 and 12 are not obvious in view of Shustack and Inui for the same reason why claim 1 is not obvious in view of Shustack and Inui.

Second, there is no motivation to combine Inui, directed to stabilizers for thermoplastic resins and which makes no mention of light or radiation curable resins, with Shustack, which is directed to radiation curable resins. Furthermore, there is no reasonable expectation of success even if Inui were combined with Shustack because there is no expectation that a thermoplastic resin stabilizer would function in a radiation cured resin. Small changes in chemistry can have significantly different results. See, for example, example 9 in table 2 of Inui vs. comparative examples 1 and 2 in table 2. All three samples use dioxaphosphosine based stabilizers but only one stabilizer was effective for that particular chemistry.

Withdrawal of the Section 103 rejection is requested because the claims would not have been obvious to one of ordinarily skill in the art when this invention was made.

Claims 13 and 14 stand rejected under 35 U.S.C. § 103 as allegedly obvious in view of a combination of Bishop (U.S. Patent No. 6,714,712) and Inui (U.S. Patent 5,889,095). Applicants traverse.

The Examiner alleges that Bishop discloses the limitations of the claimed invention. The Examiner further states “[h]owever, Bishop et al. fails to teach the specified organic phosphate stabilizer as required by instant formula (1).” See, Office Action, page 5, lines 14-15. It is the Examiner’s position that Inui provides the specified organic phosphate stabilizer.

First, Applicants note that claims 13 and 14 each depend on claim 1. Claim 1 is not anticipated by Inui as discussed above. Further, claim 1 has not been rejected as obvious in view of Bishop and Inui. Since claims 13 and 14 depend on claim 1 and incorporate all of the recitations of claim 1, claims 13 and 14 are not obvious in view of Bishop and Inui for the same reason why claim 1 is not obvious in view of Bishop and Inui.

Second, there is no motivation to combine Inui, directed to stabilizers for thermoplastic resins and which makes no mention of light or radiation curable resins, with Bishop, which is directed to radiation curable resins. Furthermore, there is no reasonable expectation of success even if Inui were combined with Bishop because there is no expectation that a thermoplastic resin stabilizer would function in a radiation cured resin.

Withdrawal of the Section 103 rejections is requested because the claims would not have been obvious to one of ordinarily skill in the art when this invention was made.

Conclusion

Having fully responded to the pending Office Action, Applicants submit that the claims are in condition for allowance and earnestly solicit an early Notice to that effect. The Examiner is invited to contact the undersigned if any further information is required.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: *Eric Sinn*
Eric Sinn
Reg. No. 40,177

901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100